

## RECENT OCCURRENCES OF YOUNG *SCHEDOPHILUS OVALIS* (CENTROLOPHIDAE) ALONG FRENCH MEDITERRANEAN COASTS

par

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**RÉSUMÉ.** - Observations récentes de jeunes *Schedophilus ovalis* (Centrolophidae) le long des côtes françaises de Méditerranée.

Plusieurs observations récentes en Méditerranée nord-occidentale du rouffe impérial, *Schedophilus ovalis* (Cuvier, 1833), nous permettent de préciser sa distribution le long des côtes françaises méditerranéennes. Malgré une augmentation sensible du nombre d'observations depuis 1995, peut-être en relation avec le réchauffement actuel des eaux, cette espèce reste peu fréquente le long des côtes françaises où seuls de jeunes individus (moins de 30 cm de longueur totale) ont été observés.

**Key words.** - Centrolophidae - *Schedophilus ovalis* - MED - Corsica - Ligurian Sea - Distribution.

The Centrolophidae includes 27 species worldwide (Fishbase, 2001; <http://www.fishbase.org/>), of which 4 occur in the Mediterranean: *Centrolophus niger* (Gmelin, 1789), *Hyperoglyphe perciformis* (Mitchill, 1818), *Schedophilus medusophagus* Coco, 1839, and *S. ovalis* (Cuvier, 1833) (Quignard and Tomasini, 2000). *Schedophilus ovalis* is present in the Eastern and Western central Atlantic, Australia, and throughout most of the Mediterranean (Haedrich, 1986, 1990; Fredj and Maurin, 1987; Brito, 1991; Lloris et al., 1991). The northern distribution of *S. ovalis* in the Eastern Atlantic extends to the Bay of Biscay (Quéro et al., 2000). Although reported to occur in South Africa (Haedrich, 1986, 1990), Heemstra (1995) mentions that the species occurring in southern Africa is not *S. ovalis* but *S. velaini* (Sauvage, 1879). As a result of these conflicting reports, Bolch et al. (1994) suggested that a revision of the *Schedophilus* genus is needed and should include morphological and electrophoretic analyses of all species.

In northwestern Mediterranean, *S. ovalis* is not frequent and has been reported from the Balearic Islands (De Buen, 1935; Stefanescu and Massutí, 1992; Massutí and Reñones, 1994; Deudero et al., 1999), Corsica (Miniconi, 1989), the Ligurian Sea (Orsi Relini et al., 1990; Relini et al., 1994; Relini, 1995), and the Adriatic (Jardas, 1996 in Dulčić et al., 1999). The only two recent records of *S. ovalis* along the french Mediterranean coasts concern south Corsica: Porto-Vecchio and Lavezzi islands (Miniconi, 1989). We recently gathered several observations of *S. ovalis* in Corsica and in the Alpes-maritimes department: one around an oceanographic buoy about 30 nautical miles offshore, and the other along the coast in shallow waters (Fig. 1).

The reported colour was often uniformly dark grey to brown or with black blotches as described by Orsi Relini et al. (1990). The measured sizes of individuals were all less than 30 cm (total length, TL) in shallow water along the coast or offshore, but one was 44 cm TL (fish angling offshore Lérins island; Tab. I); deeper, larger individuals could be fished: 40 to 50 cm TL at 96 m depth (Miniconi, 1989). This size distribution according to depth corre-

sponds to that reported by Orsi Relini et al. (1990): 60 to 106 cm TL at depth > 500 m and 25-45 cm TL from the surface to 40 m depth.

Although recent literature and unpublished observations confirm that *Schedophilus ovalis* now occurs regularly in north-western Mediterranean, it is only occasionally observed or fished. Even offshore, around buoys or FADs, *S. ovalis* is not a dominant species in fish assemblages (Orsi-Relini et al., 1990; Massutí and Reñones, 1994; Deudero et al., 1999; Pipitone et al., 2000; Deudero, 2001). However, the number of records (either published or not) have increased steadily since 1995-2000 period (Deudero et al., 1999; Pipitone et al., 2000; Deudero, 2001, and table I).

Dulčić et al. (1999) considered that the presence of *S. ovalis* and *S. medusophagus* in the Adriatic is due to water warming. The record of *S. medusophagus* larvae in Adriatic (Dulčić, 1998) and the northward extension of *S. ovalis* to the Bay of Biscay (Quéro et al., 2000) could support this hypothesis. In the same way, we assume that the observations of small to medium sized *S. ovalis* we gathered in 2000-2001 in the Alpes-maritimes department could be explained by the present warming of waters (Francour et al., 1994).

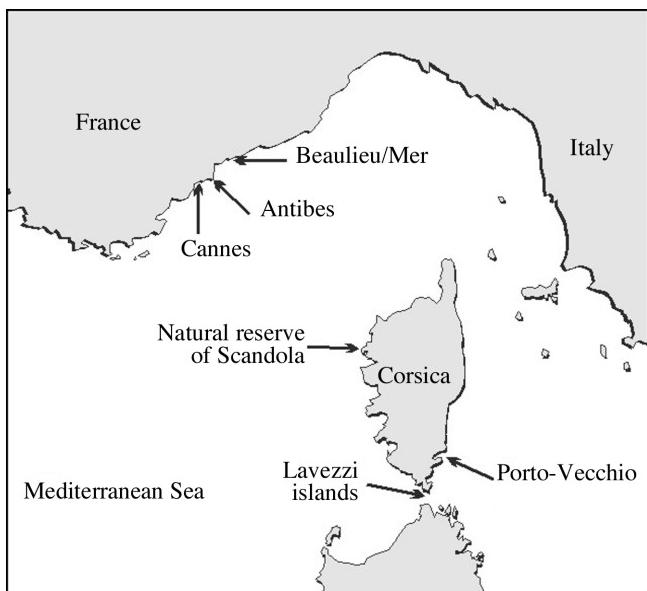


Figure 1. - Recent records of *Schedophilus ovalis* along the French Mediterranean coasts.

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Table I. - Records of *Schedophilus ovalis* along the French Mediterranean coasts (see Fig. 1). 1: Miniconi (1989 and comm. pers.); 2: Desmier X.; Finelli F.; Francour P.; 3: Géria M.; 4: Ferrero A.; 5: Thibaut T.

| Location (Source)                        | Position       | Date | Size (cm) | Habitat, Remarks   |
|--|----------------|------|-----------|--|
| Porto-Vecchio, Corsica (1)               | 41°36'N 9°26'E | 1984 | 40-50     | 2 individuals fished by trammel net (96 m depth)   |
| Lavezzi Islands, Corsica (1)             | 41°20'N 9°16'E | 1984 | 30        | 1 individual spearfished at 1 m depth  |
| Natural Reserve of Scandola, Corsica (2) | 42°23'N 8°34'E | 1997 | 27        | under floating plastic box; 1 individual   |
| Fish farming cages, Beaulieu-sur-mer (3) | 43°42'N 7°21'E | 2000 | 20        | under floating buoys; 3 individuals with a brown colour pattern with small black blotches (with small <i>Balistes carolinensis</i> ) |
| Cannes (4)                               | 43°30'N 7°03'E | 2000 | 44        | 1 individual angling below the sea surface (weight = 2.4 kg)   |
| Antibes-Juan-les-Pins harbour (5)        | 43°34'N 7°07'E | 2000 | 15        | underwater observation along a dike of 1 individual  |

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Reçu le 03 septembre 2002.

Accepté pour publication le 08 novembre 2002.